



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,756	08/22/2006	Wilhelm Schneider	SCHN3004/EJD	7325

23364 7590 07/28/2008
BACON & THOMAS, PLLC
625 SLATERS LANE
FOURTH FLOOR
ALEXANDRIA, VA 22314-1176

EXAMINER

NORTON, JENNIFER L

ART UNIT	PAPER NUMBER
----------	--------------

2121

MAIL DATE	DELIVERY MODE
-----------	---------------

07/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/566,756

Applicant(s)

SCHNEIDER ET AL.

Examiner

JENNIFER L. NORTON

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 2/1/06
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-7 were cancelled. Claims 8-14 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 8 recites the limitation "the fieldbus protocol" in line 2; and "the steps" in line 4. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 14 recites the limitation "the fieldbus" in lines 4 and 7. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 8-14 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent Publication 2002/0103946 (hereinafter Gaiser).

8. As per claim 8, Gaiser discloses a method for automatic adjustment of a bus-capable field device (Fig. 1, element 1) of process automation technology to the fieldbus protocol utilized on a fieldbus (pg. 2, par. [0027]-[0029] and Fig. 1, element 3), with multiple fieldbus stack programs (pg. 2, par. [0029]; i.e. different protocols) stored in the field device (Fig. 1, element 1), which programs serve to extract wanted data from telegrams (i.e. messages of different protocols) of various fieldbus systems (pg. 2, par. [0029]; i.e. Profibus protocol and Fieldbus protocol), comprising the steps of:

receiving telegrams (i.e. messages of different protocols) sent via the fieldbus (pg. 2, par. [0027]-[0029] and Fig. 1, element 3);

transferring the telegrams to the fieldbus stack programs (pg. 2, par. [0029]; Fig. 1, element 1 receives the telegrams from Fig. 1, element 2 via Fig. 1, element 3);

processing the telegrams in the fieldbus stack program (pg. 2, par. [0029]; Fig. 1, element 1 receives the telegrams from Fig. 1, element 2 via Fig. 1, element 3 to determine what type of protocol is needed for processing the message(s)); and

selecting a fieldbus stack program for further data exchange with the fieldbus (Fig. 1, element 1's method of first determining if one protocol is successful, if not successful, switching to subsequent protocols), which program has extracted further

processable, wanted data from at least one telegram (Fig. 1, element 1's method successfully determining a compatible protocol to process the telegram).

9. As per claim 9, Gaiser discloses the received telegrams are transferred successively to the various fieldbus stack programs (pg. 2, par. [0029]; Fig. 1, element 3 receives a telegram from Fig. 1, element 3 to process).

10. As per claim 10, Gaiser discloses a telegram (i.e. message) is transferred to various fieldbus stack programs (Fig. 1, element 1's method of first determining if one protocol is successful in processing the telegram, if not successful, switching to subsequent protocols to determine compatible protocol).

11. As per claim 11, Gaiser discloses at least two fieldbus stack programs are stored in the field device (pg. 2, par. [0029]; i.e. Profibus protocol and Fieldbus protocol).

12. As per claim 12, Gaiser discloses a fieldbus stack program is a Profibus PA stack or a Foundation Fieldbus stack (pg. 2, par. [0029]; i.e. Profibus protocol and Fieldbus protocol).

13. As per claim 14, Gaiser discloses a field device (Fig. 1, element 1) having multiple fieldbus stack programs stored therein (pg. 2, par. [0029]; i.e. different

protocols), which programs serve to extract wanted data from telegrams (i.e. messages of different protocols) of various fieldbus systems (pg. 2, par. [0029]; i.e. Profibus protocol and Fieldbus protocol), for execution of a method comprising the steps of:

receiving telegrams (i.e. messages of different protocols) sent via the fieldbus (pg. 2, par. [0027]-[0029] and Fig. 1, element 3);

transferring the telegrams to the fieldbus stack programs (pg. 2, par. [0029]; Fig. 1, element 1 receives the telegrams from Fig. 1, element 2 via Fig. 1, element 3);

processing the telegrams in the fieldbus stack programs (pg. 2, par. [0029]; Fig. 1, element 1 receives the telegrams from Fig. 1, element 2 via Fig. 1, element 3 to determine what type of protocol is needed for processing the message(s)); and

selecting a fieldbus stack program for further data exchange with the fieldbus (Fig. 1, element 1's method of first determining if one protocol is successful, if not successful, switching to subsequent protocols), which program has extracted further processable, wanted data from at least one telegram (Fig. 1, element 1's method successfully determining a compatible protocol to process the telegram).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gaiser in view of U.S. Patent No. 2003/0056043 (hereinafter Kostadinov).

16. As per claim 13, Gaiser teaches the field device is a sensor (pg. 1, par. [0014]).

Gaiser does not expressly teach the field device is a temperature sensor.

Kostadinov teaches the field device is a temperature sensor (pg. 2, par. [0027] and [0029]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Gaiser to include a temperature sensor to provide a flexible system to provide interchangeability among the devices' protocols (pg. 1, par. 0004]).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to automatic protocol determination.

U.S. Patent Publication No. 2006/0026269 discloses an automatic protocol

determination, a portable device detects which one of multiple protocols is being used by the host device for subsequent communication with the portable device.

U.S. Patent No. 6,959,356 discloses a multi-protocol smart field device uses a Fieldbus communication protocol to communicate process control information and uses a HART communication protocol to enable local configuration of the field device via a hand-held HART communicator.

U.S. Patent No. 7,032,045 discloses devices including industrial control devices for use with multiple communications protocols automatically determine which communications protocol to use when connected to a system bus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer L. Norton whose telephone number is (571)272-3694. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

Art Unit: 2121

more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Albert DeCady/
Supervisory Patent Examiner, Art Unit 2121

Albert DeCady
Examiner
Art Unit 2121